

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of hot-filling and capping with a closure a polymer container, the container defining head space area above a level of liquid in the filled container, comprising:
 - providing one of the closure and the head space area of the container with a hole covered with hydrophobic air permeable membrane;
 - filling the container with hot liquid;
 - applying the closure to the filled container;
 - allowing the filled container to cool; and
 - applying an air tight seal over the membrane-covered hole.
2. (Original) The method of claim 1 wherein hydrophobic air permeable membrane comprises expanded polytetraflouro-ethylene.
3. (Original) The method of claim 1 wherein hydrophobic air permeable membrane comprises polypropylene.
4. (Original) The method of claim 1 wherein the membrane has pores sized from about 0.3 to 5 microns.
5. (Original) The method of claim 1 wherein the membrane has pores sized from about 0.4 to 2 microns.
6. (Original) The method of claim 1 wherein the membrane has pores sized from about 0.5 to 1.5 microns.

7. (Original) The method of claim 1 wherein the membrane has pores having an average of about 1.0 micron.

8. (Original) The method of claim 1 wherein the hole is sized between about 50 and 100 microns.

9. (Original) The method of claim 1 wherein the seal comprises a dryable coating.

10. (Original) The method of claim 1 wherein the dryable coating comprises a UV activated sealant.

11. (Original) The method of claim 1 wherein the dryable coating comprises a paint.

12. (Original) The method of claim 1 wherein the seal comprises a semi-transparent adhesive.

13. (Original) The method of claim 1 wherein the seal comprises an air tight membrane with a pressure-sensitive adhesive on one surface thereof.

14. (Currently amended) The method of claim 1 wherein the seal comprises a composition which solidifies upon exposure to actinic radiation.

15. (Currently amended) A closure cap adapted to be applied to a hot-fill container comprising:

a top surface having an outer edge with a skirt portion depending therefrom, the top surface defining a hole therethrough;

a hydrophobic, air permeable membrane secured to the cap so as to cover fill the hole; and

an air impermeable sealing material contained within and air-tight seal over the portion of the membrane filling the hole to provide an air-tight seal over the portion of the air permeable membrane covering the hole, wherein the air-tight seal is essentially flush with the top surface.

16. (Original) The closure cap of claim 15 in which the hydrophobic air permeable membrane is secured to the inside surface of the top and further comprises a liner applied to the inside surface of the cap, the liner having a hole in registration with the hole in the top surface and overlying the hydrophobic air permeable membrane.

17. (Original) The closure cap of claim 15 wherein hydrophobic air permeable membrane comprises expanded polytetrafluoro-ethylene.

18. (Original) The closure cap of claim 15 wherein hydrophobic air permeable membrane comprises polypropylene.

19. (Original) The closure cap of claim 15 wherein the membrane has pores sized from about 0.3 to 5 microns.

20. (Original) The closure cap of claim 15 wherein the membrane has pores sized from about 0.4 to 2 microns.

21. (Original) The closure cap of claim 15 wherein the membrane has pores sized from about 0.5 to 1.5 microns.

22. (Original) The closure cap of claim 15 wherein the membrane has pores having an average of about 1.0 micron.

23. (Original) The closure cap of claim 15 wherein the hole is sized between about 50 and 100 microns.

24. (Original) The closure of claim 15 wherein the seal comprises a dryable coating.

25. (Original) The closure of claim 15 wherein the dryable coating comprises a UV activated sealant.

26. (Original) The closure cap of claim 15 wherein the dryable coating comprises a paint.

27. (Original) The closure cap of claim 15 wherein the seal comprises a semi-transparent adhesive.

28. (Original) The closure cap of claim 15 wherein the seal comprises an air tight membrane with a pressure-sensitive adhesive on one surface thereof.

29. (Original) The closure cap of claim 15 wherein the seal comprises a composition which solidifies upon exposure to actinic radiation.

30. (Currently amended) A hot-fill container with a shoulder portion defining a head space area above the level to which the container is to be filled with liquid, the head space area defining an opening to fill the container and a hole therethrough on the shoulder portion of the container above the level to which the container is to be filled with liquid;

a hydrophobic, air permeable membrane secured to the container so as to cover the hole on the shoulder portion; and

an air tight seal located within the hold and over the portion of the membrane covering the hole.

31. (Original) The container of claim 30 wherein hydrophobic air permeable membrane comprises expanded polytetraflouro-ethylene.

32. (Original) The container of claim 30 wherein hydrophobic air permeable membrane comprises polypropylene.

33. (Original) The container of claim 30 wherein the membrane has pores sized from about 0.3 to 5 microns.

34. (Original) The container of claim 30 wherein the membrane has pores sized from about 0.4 to 2 microns.

35. (Original) The container of claim 30 wherein the membrane has pores sized from about 0.5 to 1.5 microns.

36. (Original) The container of claim 30 wherein the membrane has pores having an average of about 1.0 micron.

37. (Original) The container of claim 30 wherein the hole is sized between about 50 and 100 microns.

38. (Original) The container of claim 30 wherein the seal comprises a dryable coating.

39. (Original) The container of claim 30 wherein the dryable coating comprises a UV activated sealant.

40. (Original) The container of claim 30 wherein the dryable coating comprises a paint.

41. (Original) The container of claim 30 wherein the seal comprises a semi-transparent adhesive.

42. (Original) The container of claim 30 wherein the seal comprises an air tight membrane with a pressure-sensitive adhesive on one surface thereof.

43. (Original) The container of claim 30 wherein the seal comprises a composition which solidifies upon exposure to actinic radiation.

44. (Currently amended) A closure cap adapted to be applied to a hot-fill container comprising:

a top surface having an outer edge with a skirt portion depending therefrom, the skirt portion defining a hole therethrough;

a hydrophobic, air permeable membrane secured to the cap so as to cover fill the hole; and

an air impermeable sealing material ~~air-tight seal~~ over the portion of the membrane filling the hole to provide an air-tight seal over the portion of the membrane covering the hole.

45. (Original) The closure cap of claim 44 wherein hydrophobic air permeable membrane comprises expanded polytetraflouro-ethylene.

46. (Original) The closure cap of claim 44 wherein hydrophobic air permeable membrane comprises polypropylene.

47. (Original) The closure cap of claim 44 wherein the membrane has pores sized from about 0.3 to 5 microns.

48. (Original) The closure cap of claim 44 wherein the membrane has pores sized from about 0.4 to 2 microns.

49. (Original) The closure cap of claim 44 wherein the membrane has pores sized from about 0.5 to 1.5 microns.

50. (Original) The closure cap of claim 44 wherein the membrane has pores having an average of about 1.0 micron.

51. (Original) The closure cap of claim 44 wherein the hole is sized between about 50 and 100 microns.

52. (Original) The closure of claim 44 wherein the seal comprises a dryable coating.

53. (Original) The closure of claim 44 wherein the dryable coating comprises a UV activated sealant.

54. (Original) The closure cap of claim 44 wherein the dryable coating comprises a paint.

55. (Original) The closure cap of claim 44 wherein the seal comprises a semi-transparent adhesive.

56. (Original) The closure cap of claim 44 wherein the seal comprises an air tight membrane with a pressure-sensitive adhesive on one surface thereof.

Appl. No. 10/606,439
Amdt. dated 01/09/2005
Reply to Office action of 10/07/2005

57. (Original) The closure cap of claim 44 wherein the seal comprises a composition which solidifies upon exposure to actinic radiation.